## Rec'd PCT/PTO 1 2 DEC 2001

PATENT Attorney Docket No. 440508

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Hou et al.

Group Art Unit: Unassigned

Application No. 09/914,165

Examiner: Unassigned

Filed: August 24, 2001

For: NEGATIVELY CHARGED MEMBRANE

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231



Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

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|             | 37 CF   | after (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes <i>one</i> of:  |  |  |  |  |  |  |
|-------------|---|---|--|--|--|--|--|--|
|             |   | the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).  |  |  |  |  |  |  |
|             | $\bigcap^{or}$  | the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).  |  |  |  |  |  |  |
|             | after the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 a set forth in 37 CFR 1.17(p) (see "Fees" below).  |   |  |  |  |  |  |  |
|             | after the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or be payment of the issue fee, and within thirty days of receiving each item of informationtained in the Information Disclosure Statement, and includes the Statement usafter 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).  NOTE: This is for original applications except applications for a design patent, filed on or May 29, 2000, wherein a paper containing only an Information Disclosure Statement in complewith 37 CFR 1.97 and 1.98 is being filed. |   |  |  |  |  |  |  |
| Copie       | es of the   | e References  |  |  |  |  |  |  |
| $\boxtimes$ | Attac   | es of the references listed on the enclosed Form 1449 are enclosed herewith. hed to each reference not in the English language is a concise explanation of the ence pursuant to 37 CFR 1.98(a)(3).  |  |  |  |  |  |  |
|             | A cop   | by of the foreign search report is enclosed herewith.   |  |  |  |  |  |  |
|             | paren<br>furnis<br>subm<br>The<br>accor<br>Proce<br>reliec  | references listed on the enclosed Form 1449 were previously identified in the application(s) of the present application, and copies of the references were shed at that time. Accordingly, additional copies of the references are not itted herewith, so as not to burden the file with duplicate copies of references. Examiner is respectfully requested to carefully review the references in dance with the requirements set out in the Manual of Patent Examining edure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) I upon for an earlier filing date under 35 USC 120 in which copies of the ences were previously furnished are set out below: |  |  |  |  |  |  |

U.S. APPLICATIONS

|             | 0.511111  | CATTONS           |                           | PENDING |           |  |  |  |
|-------------|---|-------------------|---------------------------|---------|-----------|--|--|--|
| U.          | S. APPLICATIONS   | U.S. FILING DATE  | U.S. FILING DATE PATENTED |         | ABANDONED |  |  |  |
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| 2           |   |                   |                           |         |           |  |  |  |
| 3.          |   |                   |                           | L       |           |  |  |  |
| Staten      | nent under 37 CFR   | 2 1.97(e)         |                           |         |           |  |  |  |
|             | The <b>undersigned</b> hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.  |                   |                           |         |           |  |  |  |
|             | The <b>undersigned</b> hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement. |                   |                           |         |           |  |  |  |
| Stater      | ment under 37 CFI   | R 1.704(d)        |                           |         |           |  |  |  |
|             | The <b>undersigned</b> hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.  |                   |                           |         |           |  |  |  |
| Fees        |   |                   |                           |         | -         |  |  |  |
|             | No fee is owed by the applicant(s). The IDS Fee of \$180 under 37 CFR 1.17(p) is enclosed herewith.   |                   |                           |         |           |  |  |  |
| Meth        | od of Payment of I  | rees              |                           |         |           |  |  |  |
|             | Attached is a check in the amount of \$ Charge Deposit Account No. 12-1216 in the amount of \$ this communication is enclosed for that purpose.)  (A duplicate copy of  |                   |                           |         |           |  |  |  |
| Auth        | orization to Charg  | e Additional Fees |                           |         |           |  |  |  |
| $\boxtimes$ | If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)  |                   |                           |         |           |  |  |  |

Status (check one)

In re Appln. of Hou et al. Application No. 09/914,165

## Instructions as to Overpayment

Credit Account No. 12-1216.
Refund

Respectfully submitted,

Registration No. 33,587

Suite 300 700 Thirteenth Street, N.W. Washington, D.C. 20006 Telephone: (202) 737-6770 Facsimile: (202) 737-6776

Dated: 12 Her. 200

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| bstitute for fo   | orm 1449A/B/PTO             |          |          | Application Number     | 09/914,165      |  |
| INE               | ORMATION                    | חופר     | LOSUPE   | Filing Date            | August 24, 2001 |  |
|                   |                             |          |          | First Named Inventor   | Hou et al.      |  |
| SIA               | TEMENT BY                   | 1 AP     | PLICANI  | Group Art Unit         |                 |  |
|                   | (Use as many sheet          | s as nec | cessary) | Examiner Name          |                 |  |
| Sheet             | 1                           | of       | 1        | Attorney Docket Number | 440508          |  |

| U.S. PATENT DOCUMENTS |          |                                 |              |                               |                        |                               |  |
|-----------------------|----------|---------------------------------|--------------|-------------------------------|------------------------|-------------------------------|--|
| 1                     |          | U.S. Patent Document            |              |                               |                        |                               |  |
| Examiner<br>Initials  | Doc. No. | Application or<br>Patent Number | Kind<br>Code | Name of Patentee or Applicant | Date of<br>Publication | Filing Date If<br>Appropriate |  |
|                       | A 1      | 5,843,789                       |              | Nomura et al.                 | 12/01/1998             |                               |  |
|                       | A 2      | 5,783,094                       |              | Kraus et al.                  | 07/21/1998             |                               |  |
|                       | A 3      | 5,021,160                       |              | Wolpert                       | 06/04/1991             |                               |  |
|                       | A 4      | 4,617,321                       |              | MacDonald                     | 10/14/1986             |                               |  |
|                       | A 5      | 4,455,370                       |              | Bartelsman et al.             | 06/19/1984             |                               |  |
|                       |          |                                 |              |                               |                        |                               |  |
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| FOREIGN PATENT DOCUMENTS |          |        |                                 |              |                               |                        |             |      |
|--------------------------|----------|--------|---------------------------------|--------------|-------------------------------|------------------------|-------------|------|
|                          |          | F      | oreign Patent Docume            | nt           |                               |                        | Translation |      |
| Examiner Initials        | Doc. No. | Office | Application or<br>Patent Number | Kind<br>Code | Name of Patentee or Applicant | Date of<br>Publication | Yes         | No*+ |
|                          | A 6      | wo     | 98/17377                        |              | Mika et al.                   | 04/30/1998             |             | ]    |
|                          | Α7       | wo     | 96/14151                        |              | Muller et al.                 | 03/17/1996             |             | X+   |
|                          | A 8      | DE     | 44 39 444 A1                    |              | Muller et al.                 | 05/09/1996             | 1           | X    |
|                          | A 9      | EPO    | 0 474 617 A1                    |              | Stedronsky                    | 03/11/1992             |             |      |
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|                          |          |        |                                 | 1            |                               |                        |             |      |
|                          |          | [      | 1                               |              |                               |                        |             | 1    |

|          | OTHER - NON PATENT LITERATURE DOCUMENTS |  |     |      |  |  |  |  |  |
|----------|---|--|-----|------|--|--|--|--|--|
| Examiner | Doc. No.                                | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item  |     |      |  |  |  |  |  |
| Initials |   | (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Yes | No*+ |  |  |  |  |  |
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| Examiner Signature | Date Considered |  |
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| L                  |                 |  |

<sup>\*</sup> A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).